

BEST AVAILABLE COPY

Application No.:
10/065,003
Docket NO.:8879-US-PA

Claim Amendment

Please amend the claims according to the following listing of claims and substitute it for all prior versions and listings of claims in the application.

1. (currently amended) A method of forming holes in a photoresist layer over a substrate, comprising the steps of:

exposing the photoresist layer to light through a photomask, wherein the photomask has a plurality of repeated rectangular patterns with inwardly reduced corners having at least a straight cutting side thereon; and

developing the photoresist layer to form holes.

2. (original) The method of claim 1, wherein after the step of developing the photoresist layer, further includes implanting ions into the substrate using the developed photoresist layer as a mask.

3. (currently amended) The method of claim 1 wherein after the step of implanting ions into the substrate, further includes removing the photoresist layer.

4. (original) The method of claim 1, wherein the rectangular patterns with inwardly reduced corners on the photomask are suitable for exposing a positive photoresist layer.

5. (original) The method of claim 1, wherein the rectangular patterns with inwardly reduced corners comprises a cross-shape pattern.

Application No.:
10/065,003
Docket NO.:8879-US-PA

6. (original) The method of claim 1, wherein the rectangular patterns with inwardly reduced corners comprises a pattern with cut corners.

7. (original) A method of forming holes through a cross-shape image exposure, comprising the steps of:

forming a photoresist layer over a semiconductor substrate;

conducting an exposure using a photomask having a plurality of cross-shape patterns thereon;

developing the exposed photoresist layer to form a plurality of holes and exposing a portion of the dielectric layer; and

implanting ions into the semiconductor substrate using the developed photoresist layer as a mask.

8. (original) The method of claim 7, wherein after the step of implanting ions into the semiconductor substrate, further includes removing the photoresist layer.

9. (original) The method of claim 7, wherein the cross-shape patterns on the photomask are suitable for exposing a positive photoresist layer.

10. (original) A method of forming contact holes through a cross-shape image exposure, comprising the steps of:

forming a semiconductor device over a semiconductor substrate;

forming a conductive layer over the semiconductor substrate, wherein the conductive layer is electrically connected to the semiconductor device;

Application No.:
10/065,003
Docket NO.:8879-US-PA

forming a dielectric layer over the semiconductor substrate, wherein the dielectric layer covers the semiconductor device and the conductive layer;
forming a photoresist layer over the dielectric layer;
conducting a photo-exposure using a photomask having a plurality of cross-shape patterns thereon;
developing the photoresist layer to form a plurality of holes; and
etching the dielectric layer using the developed photoresist layer as an etching mask to form a plurality of contact holes that exposes the conductive layer.

11. (original) The method of claim 10, wherein the cross-shape patterns on the photomask are suitable for exposing a positive photoresist layer.

12. (original) The method of claim 10, wherein after the step of etching the dielectric layer, further includes removing the photoresist layer.

13. (original) The method of claim 10, wherein after the step of forming a dielectric layer over the semiconductor substrate, further includes planarizing the dielectric layer.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.